

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1-22. (canceled).

23. (previously presented) A bone instrumentation cover capable of being installed over bone instrumentation which projects from the bone during bone repair or reconstruction surgical procedure on an animal comprising:

a hollow cap sized for encapsulating a part of a bone instrumentation which has been installed in bone, the hollow cap adapted for placement in the body of the animal and for encapsulating a part of the bone instrumentation which projects from the bone, the hollow cap being adapted to provide a medically safe physical barrier between the part of the bone instrumentation and the surrounding bone and soft tissue, the hollow cap being adapted to separate the part of the bone instrumentation from substantially all of the surrounding soft tissue so that the hollow cap prevents ingrowth of substantially all of the surrounding soft tissue through the cap into the bone instrumentation which projects from the bone, and

the hollow cap having a fastener portion adapted for securing the cap to the bone instrumentation portion which projects from the bone.

24. (previously presented) A bone instrumentation cover or shield according to claim 23, wherein the fastener portion includes

a cinch ring provided with openings therein, said cinch ring not being a part of said hollow cap, and said cinch ring being tubular in form having one or more draw strings for tightening the hollow cap circumferentially around the instrumentation during said bone repair or reconstruction surgical procedure, and

a suture string for securing the hollow cap to one of adjacent bone and adjacent tissue.

25. (previously presented) A bone instrumentation cover according to claim 24, further including a plurality of first suture strings each first suture string having a first end and a second end, the first ends of the first suture strings being fixedly connected to the hollow cap, and the second ends of the first suture strings are threaded through the cinch ring for tightening the hollow cap to the cinch ring with the hollow cap extending over the bone instrumentation installed during the bone repair or reconstruction surgical procedure.

26. (previously presented) A bone instrumentation cover according to claim 25, further including a second suture string with a first end of the second suture string coupled to an edge of the cap and with a second end of the second suture string coupled to the cinch ring.

27. (previously presented) A bone instrumentation cover according to claim 26, further including an additional second suture string with a first end of the additional second suture string coupled to an edge of the cap and with a second end of the additional second suture string attached to the cinch ring and wherein the second suture string and additional second suture string are on opposite sides of the hollow cap.

28. (previously presented) A bone instrumentation cover according to claim 27, wherein the hollow cap is adapted for removal in a subsequent surgical procedure.

29. (previously presented) A bone instrumentation cover according to claim 23, wherein the hollow cap encapsulates substantially all of the bone instrumentation which projects from the bone.

30. (currently amended) A bone instrumentation cover capable of being installed in vivo over the bone instrumentation during bone repair or reconstruction surgical procedure comprising:

a hollow cap shaped to encapsulate a part of a pedicle screw which has been installed in bone in the body of a human, the hollow cap being shaped to encapsulate a part of the pedicle screw which projects from the bone and is in the body of the human, the hollow cap being adapted for permanent placement in the body of the human, the hollow cap being adapted to separate the part of the pedicle screw in the body of the human from surrounding bone and soft tissue, the hollow cap separating the part of the pedicle screw from substantially all of the surrounding soft tissue so that the hollow cap prevents ingrowth of bone or tissue through the cap into the part of the pedicle screw which projects from the bone, and

a fastener for snugly securing the cap to the pedicle screw.

31. (previously presented) A bone instrumentation cover according to claim 30, further including sutures that are absorbable in vivo for securing the hollow cap to one of adjacent bone and adjacent tissue.

32. (previously presented) A bone instrumentation cover according to claim 31, wherein the sutures include a plurality of adjustable suture strings each adjustable suture string having a first end and a second end, the first ends of the adjustable suture strings being fixedly connected

to the hollow cap, and the second ends of the adjustable suture strings are threaded through a cinch ring tightening the hollow cap to the cinch ring with the hollow cap extending over the pedicle screw installed during the bone repair or reconstruction surgical procedure.

33. (previously presented) A bone instrumentation cover according to claim 32, further including a non-adjustable suture string with a first end of the non-adjustable suture string tied to a lower edge of the cap and with a second end of the non-adjustable suture string attached to the cinch ring.

34. (previously presented) A bone instrumentation cover according to claim 32, wherein the cinch ring has openings therein, said cinch ring not being a part of said hollow cap, and said cinch ring being a tubular form.

35. (withdrawn) A bone instrumentation cover according to claim 23, wherein the hollow cap includes pleats adapted for adjustment of one of the length, width and height of the hollow cap so that the hollow cap fits snugly around the bone instrumentation.

36. (currently amended) A bone instrumentation cover or shield capable of being installed over the instrumentation during bone repair or reconstruction surgical procedure comprising:

a cap comprising means ~~adapted~~ for placement in the body of the animal and for separating a projecting portion of bone instrumentation which has been installed in bone *in vivo* in the animal from substantially all of the surrounding soft tissue and for providing a medically safe physical barrier between the part of the bone instrumentation which projects from the bone and the surrounding soft tissue in the animal so that the cap prevents ingrowth of substantially all of the surrounding soft tissue into the bone instrumentation which projects from the bone.

37. (withdrawn) A bone instrumentation cover according to claim 23, wherein the fastener portion includes a lower frame of the hollow cap provided with an open, box-like aperture shaped for locking the cap to the bone instrumentation

38. (previously presented) A bone instrumentation cover according to claim 23, wherein the hollow cap is made of a medically safe material consisting of GoreTex™, or Dacron™ or polyurethane.

39. (previously presented) A bone instrumentation cover according to claim 30, wherein the hollow cap is made of a medically safe material consisting of GoreTex™, or Dacron™ or polyurethane.

40. (currently amended) The combination of a bone implant and a barrier comprising a bone implant capable of extending from the bone of an animal, and a barrier material adapted for snugly covering only the portion of the bone implant in the animal which projects from the bone and separating the bone implant from substantially all of the surrounding soft tissue, wherein the barrier material is a medically safe physical barrier between the portion of the part of the bone implant that is covered and the surrounding soft tissue of the animal [[and]] wherein the barrier material prevents ingrowth of substantially all of the surrounding tissue into the instrumentation and wherein the barrier material is adapted to be installed on the bone implant after the implant has been installed in the bone of an animal.

41. (previously presented) The combination of claim 40, wherein the bone implant is a pedicle screw.

42. (previously presented) The combination of claim 40, wherein the barrier material is designed to be adjusted around the portion of the bone implant which projects from the bone so that it snugly covers the portion of the bone implant which projects from the bone.

43. (previously presented) The combination of claim 40, wherein the barrier material is hydrogel.

44. (previously presented) The combination of claim 36, wherein the means for providing a medically safe physical barrier comprises hydrogel.

45. (previously presented) The combination of claim 23, wherein the hollow cap comprises hydrogel.